DD-250

2 x 5 DVI Distribution Amplifier

Owner's Manual

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DD-250 Package Contents

Please make sure all of the following items are included in the package:

- DD-250 unit
- DC 12V 4A Power supply adapter
- AC Cord
- Rack ears
- Owner's Manual

General Specifications

The PureLink DD-250 2x5 Distribution Amplifier is designed to distribute up to 5 DVI outputs (PC, AVR) at full 1080p HD, to as many as 5 HD display monitors with no degradation of the original signal quality or distortion of the image.

The DD-250's compact, durable and low power-consumption design makes it an ideal solution for connection of the high definition video and audio content in digital display devices, such as an LCD, Plasma, LED, Projector, etc. In addition, the DD-250 offers quick and easy plug-and-play installation for commercial or residential systems.

Item	Description
Model	DD-250
Input Signal	DVI Single Link , 2 input ports
Output Signal	DVI Single Link , 5 output ports
Video Resolution	PC: VGA ~ WUXGA HDTV: 480i/p ~ 1080i/p
Connector Type	DC Power Jack DVI 29 Pin Female
Supported Version	DDWG DVI 1.0 HDMI 1.3
HDCP Compliant	Yes
Power Consumption	DC +12V 4A , 13W Max
Dimension	13.7(W) x 6.4(D) x 1.7(H) Inch
Weight	3.7 lbs

Environmental and Reliability Specifications

1 Operating Conditions

Temperature	: 10℃~ 40℃
Humidity	: 10% ~ 80%, non-condensing
Altitude	: maximum 3,000m

2 Transportation Conditions

Temperature	: -25℃~ 60℃
Humidity	: 5% ~ 95%, non-condensing
Altitude	: maximum 15,000m

3 Storage Conditions

Temperature	: -20℃~ 45℃
Humidity	: 5% ~ 95%, non-condensing
Altitude	: maximum 3,000m

4 Reliability Specifications

MTBF: more than 50,000 hours aging-test at 90% confidence level

Reliability Specifications and item: Conform to “Specification of reliability test for an LCD monitor”

Main Features

High Quality Picture - No Signal Loss / Digital Noise Free

PureLink's Distribution Amplifiers are built to deliver the highest quality picture, preserving the native resolutions of the video sources without any signal loss. At the same time, the digital noise that may affect the picture quality will also be eliminated. Due to the nature of the digital signals and passage through multiple stages of connection when using distribution amplifiers, it is important to eliminate the digital noise and boost the signal strength to preserve and enhance the video signal quality.

Signal Amplification for reliability and long-length signal transmission

PureLink's 12V power adapter supplies adequate power to amplify the video signals from the video source. This is necessary as the overall length from the video source to the displays is longer when using the distribution amplifiers (distance from the video source to the distribution amplifier + distance from the distribution amplifier to the display). In most cases, the overall distance that the DVI signal will need to travel is over 10ft. Due to the nature of DVI signals, amplification is necessary to ensure the video quality and reliability. (Without amplification, there may be occasional blackouts or blinking effects) With this amplification feature, your video display can be extended up to 2300ft using our fiber optic DVI extenders or cables.

Support HDMI v1.3

The DD-250 is fully compatible with HDMI version 1.3

HDCP (High-bandwidth Digital Content Protection) Compliant

PureLink's DVI distribution amplifiers are fully HDCP compliant. Many video sources such as Blu-ray DVD players and Satellite/Cable Receivers are HDCP encrypted to protect the copyrights of those who created it. For these video sources to be displayed correctly, an HDCP compliant device (e.g., TV, DVI Switch, Distribution Amplifier, etc.) is required.

Setup / Installation

CABLE INSTALLATION

1. Turn off the whole system before connecting any cables
2. Connect your video source's output DVI cable to DD-250's input port using a standard DVI cable.
3. Connect the DD-250's output to your display device(s) input port using a standard DVI cable.
4. Plug the 12V power adapter in to the DD-250
5. You may start turning on your system in the following order : DD-250 -> Display ->Video Source.
6. Input LED #1,2 and Output LED # 1~5 will be lit if everything is properly installed.

STARTUP

The LCD screen will display the following message after power-ON

< DVI > **Distribution**

The LCD screen will display the input video resolution when signal is detected

DVI **1920*1200@60**

or

DVI **1080P 2ch**

The LCD screen will display the following message when there is no signal detected.

No Signal

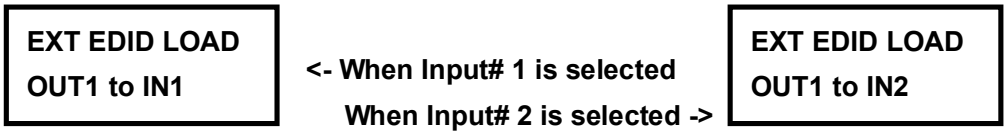
How to program EDID (Extended Display Identification Data)

In EDID programming, there are two different ways of saving the EDID information.

1. Save the EDID from an external display device connected onto output #1
2. Use our pre-programmed internal EDID library

External EDID programming:

1. Select the Input number (make sure the input LED light is lit)
2. Connect your display device to output #1
3. Go to the MENU screen and press ENTER button to save your EDID into the DD-250



You will see the following error message if the EDID data program failed or there is no EDID data present. You may also want to check the cable connection or monitor's power supply if an error occurs:

Internal EDID Programming:

1. Press MENU button twice or more to find the appropriate EDID data for your application, and then press the ENTER button to confirm the change.

The internal EDID list is as follows:

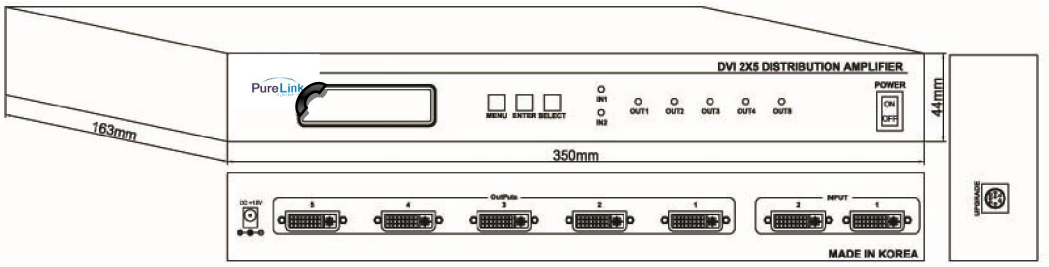
The number represents the number of times the MENU button is pressed

1. EXT EDID
2. 800x600
3. 1024x768
4. 1280x1024
5. 1360x768
6. 1366x768
7. 1400x1050
8. 1600x900
9. 1600x1200
10. 1680x1050
11. 1920x1200
12. 1080i 2ch(audio)
13. 1080p 2ch
14. 1080p Multi

Please note that all DD-250 are normally set to 1920x1080p 2ch audio as a default setting when released from the factory. If the default setting does not work for your system, please program either an external EDID or an EDID from our pre-loaded selections .

Mechanical Specifications

Dimension DD-250 : 13.7(W) x 6.4(D) x 1.7(H) Inch, Weight: 3.3 lbs



Front Panel:

MENU Button : Menu selection

ENTER Button : Save/ Select

SELECT Button : Input selection

IN 1, 2 : Input status LED

OUT 1~5 : Output status LED

Side Panel:

Firmware: software upgrade port

Rear Panel :

DC +12V : Power receptacle / OUTPUT 1~5 : DVI port / INPUT 1,2 : DVI port

Technical Specifications

Frequency bandwidth: 2.65 Gbps (Single Link)

Supporting Graphic Resolution: Supports all standard display resolutions up to WUXGA (2048 X 1080 / 1920 X 1200 @ 60Hz), UXGA, SXGA, XGA, VGA & 480i/p, 720i/p, 1080i/p)

Input Connector: DVI Female x 2

Output Connector: DVI Female x 5

Power adapter: DC 12v, 4a

Power Consumption: 13W Max

Warranty Information

2 (Two) Years Warranty:

Dtrovision warrants this Purelink DD-250 DVI Distribution Amplifiers to be free from defects in workmanship and materials, under normal use and service, for a period of two (2) years from the date of purchase from Purelink or its authorized resellers.

If a product does not work as warranted during the applicable warranty period, Dtrovision shall, at its option and expense, repair the defective product or part, deliver to customer an equivalent product or part to replace the defective item, or refund to customer the purchase price paid for the defective product.

All products that are replaced will become the property of Dtrovision.

Replacement products may be new or reconditioned.

Any replaced or repaired product or part has a ninety (90) day warranty or the reminder of the initial warranty period, whichever is longer.

Dtrovision. shall not be responsible for any software, firmware, information, or memory data of customer contained in, stored on, or integrated with any products returned to Dtrovision for repair under warranty or not.

Warranty Limitation and Exclusion

Dtrovision shall have no further obligation under the foregoing limited warranty if the product has been damaged due to abuse, misuse, neglect, accident, unusual physical or electrical stress, unauthorized modifications, tampering, alterations, or service other than by Dtrovision or its authorized agents, causes other than from ordinary use or failure to properly use the Product in the application for which said Product is intended.

Troubleshooting

Problem	Solution
Distribution Amplifier does not operate	Make sure the 12V power is plugged in the back of the unit. Check to see if the power LED light is on.
No picture (or signal) Or Poor picture	1. In case your video source is HDCP enabled, make sure your video display (HDTV) is HDCP compliant. 2. If you are using a copper based DVI cable, overall length of the cables (length of the cable from video source to switch and length of the cable from switch to display) should not exceed 20ft. Exceeding 20ft. with copper based cables will result in no or poor picture quality. To extend beyond 20ft, please use fiber optic DVI extension cables such as the Purelink HDX II series 3. Use high quality DVI cables. 4. If you are using computers, try other refresh rate settings. Most HDTV's have refresh rate of 48Hz and computer's video cards are usually set at higher refresh rate. Try lower refresh rates. 5. Make sure all DVI connectors are tightly secured to all DVI ports. Loosened screws on the DVI connectors will result in no or poor picture. 6. Turn off all equipment (video source, switch and HDTV) and restart all equipment.
Incorrectly sized picture /resolution or No picture	Please remember that your video source will only transmit one resolution setting. To connect varying resolution displays (1920x1200 resolution display and 1024 x 768 resolution display) the resolution setting of your video source must be set to the lowest resolution setting (1024 x 768).